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ABSTRACT

One of the new dimensions of vocational and career counseling is the recognition of the continuity in careers. Despite periods of unemployment and despite a radical change of occupations, the person having these experiences of change is still the same person. Although a career involves the life pursuits of a person, there are several differing conceptions of what characterizes a career. Models that are frequently used are the rocket model, the rolling mill model, the stability model, the rainbow model, and the life-stage model. The concepts of developmental tasks and of the life stages into which they can generally be grouped, as exemplified by the life-stage model, led to the development of the concept of "career maturity." Career maturity has been defined as readiness to cope with the developmental tasks appropriate to one's life stage. The model of adult maturity or adaptability has evolved from recent work. A new model of career assessment is clearly needed, one that is more comprehensive and more developmental than the classical matching model. One such model--the developmental assessment model--resembles the classical model, but has differences, including ascertaining the relative importance of the work role and other major roles in the life scheme of the client. This new model may lead to a new "quiet revolution" in counseling. (KC)

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New Dimensions in Adult Vocational and Career Counseling

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Occasional Paper No. 106

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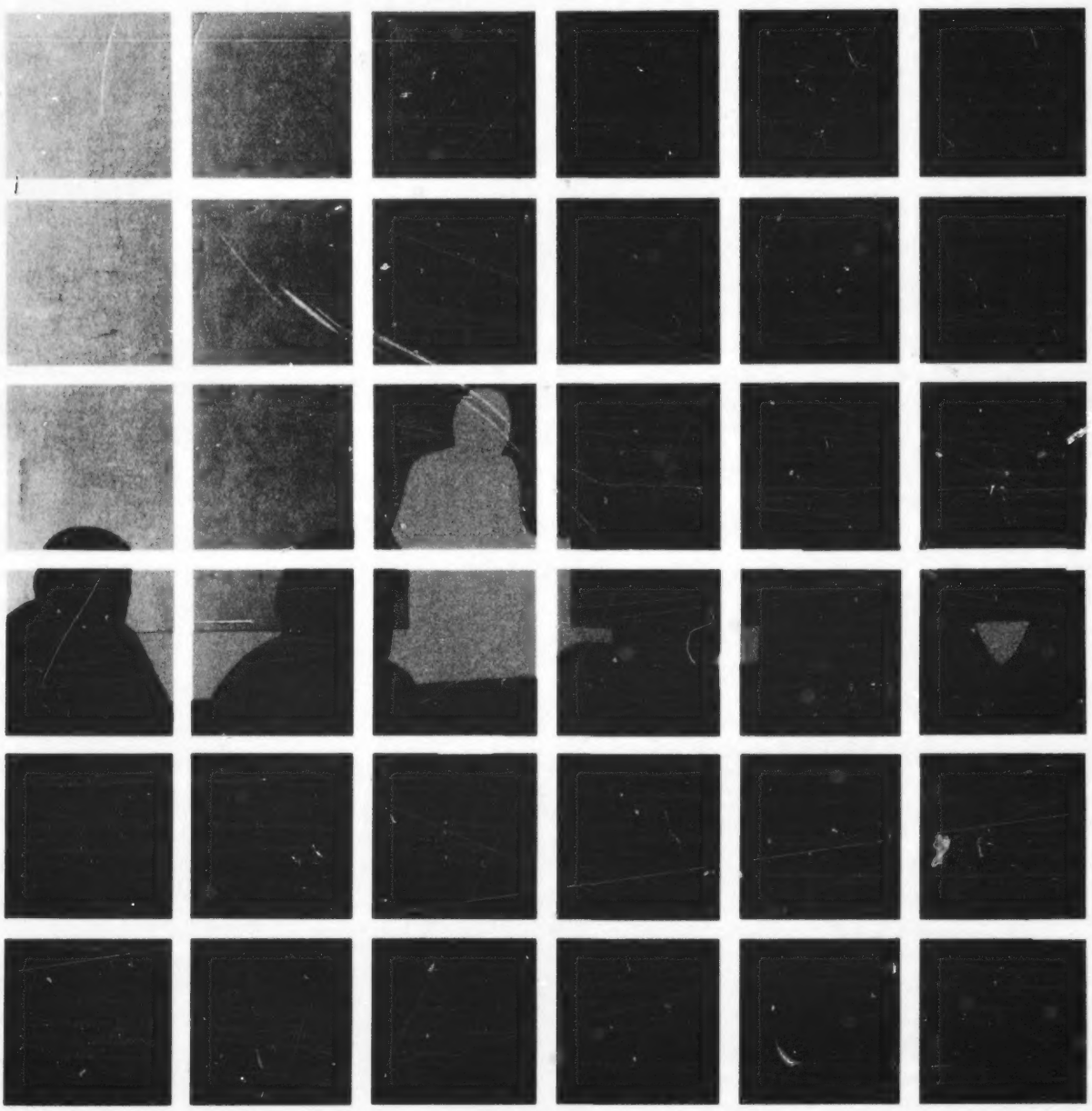

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Occasional Paper No. 106

NEW DIMENSIONS IN ADULT VOCATIONAL AND CAREER COUNSELING

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1985

FOREWORD

Substantial evidence is available to document the occupational mobility of today's American labor force. More than 10 million people change occupations or employers every year, and on an average, adult workers can be expected to change occupations at least five times during their lifetime.

The current unemployment rate for adults in America is 7.2 percent. Forty percent of the American adult population still has less than a high school education; consequently, our citizens lack the required basic and employability skills necessary to participate successfully in the labor force. A critical need exists to extend vocational education training and retraining programs to the 2 million displaced adult workers who have become obsolete remnants of our steel, automobile, textile, and other industries. Technological advancements have simply displaced their skills.

Education and training is a lifelong process. Within the present climate of sharply rising unemployment, functional illiteracy, and rapid technological change, both vocational training and career counseling are critical elements to the process. They are mutually supportive. Vocational education teachers and other professionals in the education profession need to develop effective counseling techniques to meet the growing career needs of adults.

Our 107th National Center Leadership Development Seminar featured Dr. Donald Super, who is now Adjunct Professor of Psychology and Counselor Education at the University of Florida, and Professor Emeritus of Psychology and Education, at Teachers College, Columbia University. In addition, he currently serves as International Coordinator of the Work Importance Study at Florida. He is, simultaneously, and has been since 1976, a Fellow of the National Institute for Careers Education and Counseling in Cambridge, England, where he was for several years a Fellow of Wolfson College, Cambridge University. He has also been Visiting Professor of Psychology at the University of Paris (Rene Descartes).

A graduate of Oxford and a Columbia Ph.D. holding a S.Sc. (Hon. Causa) from Lisbon, and from 1945 to 1975 active as a professor at Columbia, he has taught not only there, at Cambridge, and at the Sorbonne, but also at Clark in Worcester, Massachusetts, the University of California at Berkeley, Harvard, Virginia Tech, and now most recently at Florida (Gainesville). When he retired from active teaching at Columbia, he was Chairman of the Department of Psychology and Director of the Division of Psychology and Education in its Teachers College.

Dr. Super has served as President of the American Personnel and Guidance Association (now AAED), of which he was one of the founders in 1951; as President of the National Vocational Guidance Association; as President of the Division of Counseling Psychology of the American Psychological Association; and from 1975 to 1983 as President of the International Association for Educational and Vocational Guidance. He is a member of the Board of Directors of the International Association of Applied Psychology, a Fellow of the British Psychological Society and of the American Psychological Association, and an Honorary Member of the Spanish Psychological Society.

As a consulting psychologist, Dr. Super has been associated with the Management Development Centers of IBM, Honeywell, and General Electric, and has directed projects on personnel research for AT&T, IBM, Western Electric, and other major companies. He is a consultant, too, to UNESCO and the Organization for Economic Cooperation and Development, and to the Italian National Council on the Economy and Work. He is currently working in several school systems in New Jersey, Maryland, and Michigan.

In the field of test development, Dr. Super is an authoritative, recognized author. His most well-known publications include the following:

- *Appraising Vocational Fitness*
- *The Psychology of Careers*
- *The Career Development Inventory*
- and the various critiques of tests that he contributed to Buros' *Mental Measurements Yearbooks*

The National Center and The Ohio State University are pleased to present Dr. Super's expert insights and comments from his speech "New Dimensions in Adult Vocational and Career Counseling" as it was presented to the National Center staff.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

NEW DIMENSIONS IN ADULT VOCATIONAL AND CAREER COUNSELING

The title of this paper involves two qualifiers of the word "counseling," one of which is redundant in the minds of some people, but both of which others would consider necessary for public relations and perhaps even for communication reasons. These terms are, of course, the adjectives *vocational* and *career*. More formal definitions and derivations have already been discussed at some length in a booklet published by the Office of Career Education (Super 1976) and in an article in the *Journal of Career Education* (Super 1978). It is helpful, however, to remember that occupations exist in the economy and have existed in history, even when no one—no man, woman, or child—is engaged in them. Careers, on the other hand, exist only when people feel committed to them or are pursuing them.

A vocation is something a person wants to do to earn a living; a career is the sequence of things that a person does during the course of a lifetime, which includes preoccupational, occupational, avocational, and postoccupational roles—all the positions that a person occupies. Occupations, trades, and professions exist independently of any person; vocations involve a relationship between a person and an occupation; careers are peculiarly personal in that only I can pursue my career and only you can follow yours.

One of the new dimensions of vocational and career counseling is this recognition of the continuity, even with discontinuity, in careers. Despite periods of unemployment and despite a radical change of occupations, the person having these experiences of change is still the same person. He or she brings the same background, the same capacities (except as these are modified by experience), the same education and skills, and the same long-term experience record to the new situation. The new encounter may add to the person's experiences and it may modify his or her capacities and skills, but the individual remains the same even while changing; the new is the product of the old.

Conceptions of Careers

Although a career involves the life pursuits of a person, there are several differing conceptions of what characterizes a career. As the focus here is primarily on occupational careers, the first examples are conceptions in this category.

First is a *rocket model*, illustrated in figure 1. Here is a popular longitudinal conception of a career, with the individual represented by a rocket who takes off after leaving college, rises in his or her twenties and early thirties, reaches a peak in the mid-forties, and follows a path of accelerating decline as the fuel supply begins to give out. After this, the person in question may glide on through late middle age and old age, or may do a nosedive and fall out of the occupational orbit when declared redundant before retirement, if he or she is unable to adapt through new placement or through retraining.

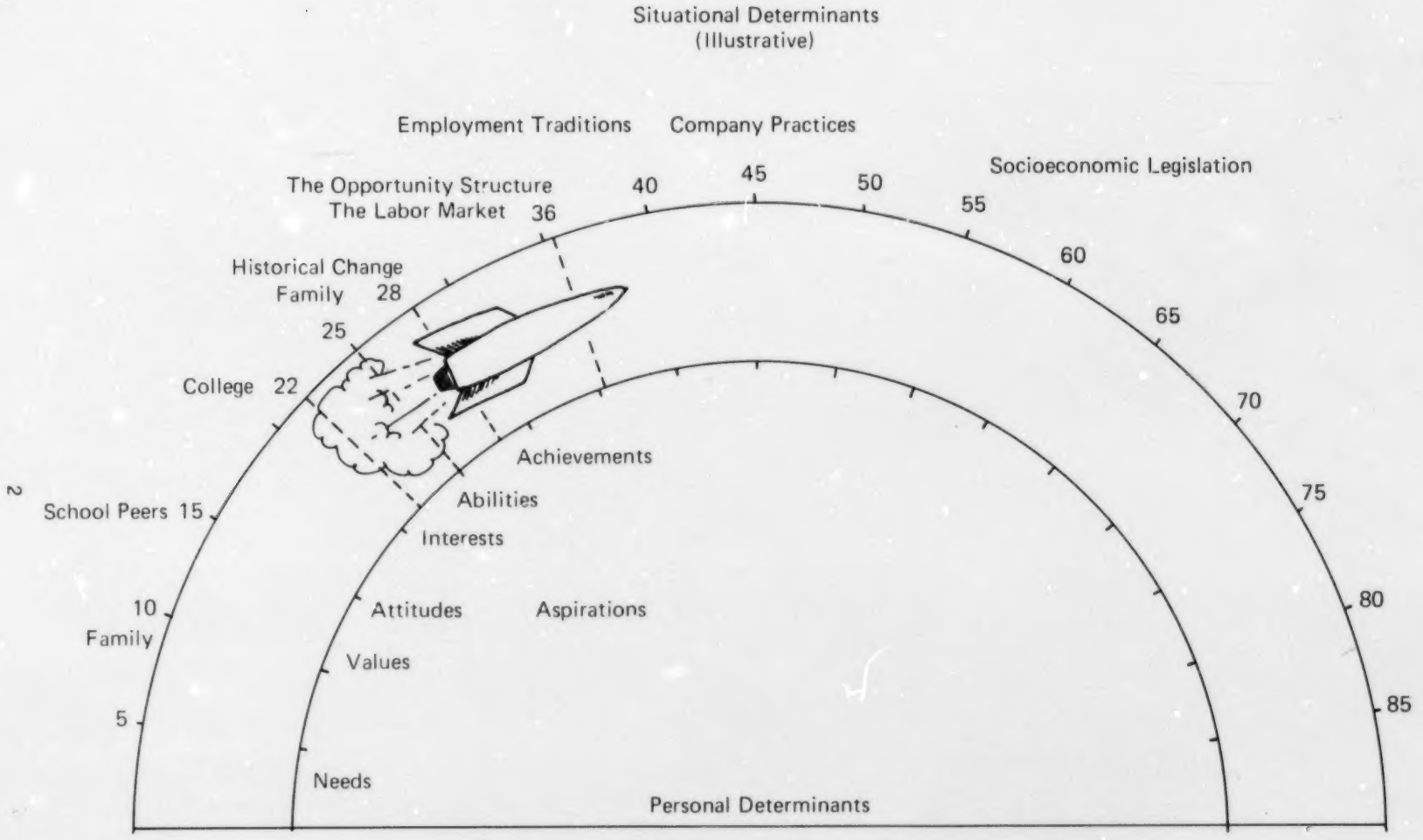


Figure 1. The conventional career model—the rocket model and a trajectory of a career

The second example is the *rolling mill model*, a less popular but more scientifically based conception of a career (see figure 2). Here, the analogy is not that of a rocket in orbit, but rather one of a metal-rolling mill in which the hot slab of iron or steel, or the ingot of gold or silver, is the solid dark object already between the rollers at the left. As the ingot rolls on between the rollers and responds to their pressures, it will be shaped by its passage and turned into a thin piece of sheet metal.

The environmental pressures shaping the career of the individual are shown in this model, as they were in the rocket model; but more clearly, they are the situational determinants represented by the upper row of cylinders, which are identified here as the social structure, the educational system, the labor market, company policies, and legislation. (Other socioeconomic determinants have not been included, simply to avoid cluttering the figure.) Notice that in the case of the last rollers, the cylinders are not necessarily heavy weights pressing the individual down, flattening him or her and the career (as the arrows suggest), but may permit rising higher. They may even, as in the case of affirmative action legislation, pull the person higher occupationally than he or she would rise under the upward pressure of individual needs, values, interests, abilities, and achievements. These last may all tend to make the career take on the shape of the rocket model (if one can conceive of a rocket emerging from a rolling mill!) by exerting only upward pressures (as shown in the first cylinders of the person row), or they may (as shown on the final cylinder) drag the career and the person downward. This model tells more about the social and psychological factors that shape careers than the rocket model, but it has at least two limitations: (1) it does not show the shape of a career and (2) as used by most people, undue emphasis is placed on either the socioeconomic determinants or on the psychological. This bias is seen most clearly in the writings of scholars in each of those fields, who typically have not had the more balanced training of educational and vocational counselors. Thus, British sociologist Kenneth Roberts (Watts, Super, and Kidd 1981) espouses helping people adapt to the opportunity structure rather than facilitating their self-realization. Critics who have read psychometrically oriented writings (e.g., Super and Crites 1962) but not other related works dealing equally with socioeconomic determinants (e.g., Super 1957) think they see in them a neglect of socioeconomic factors. Counseling specialists, such as Peter Daws and W.G. Law (in Watts, Super, and Kidd 1981), synthesize all the pertinent determinants in their writing more successfully.

The third model is the *stability model* of careers that was developed as part of a sociological study of work histories (Miller and Form 1951). Figures 3 and 4 merit some study and thought, but in essence, four types of careers emerge from the model: conventional, stable, unstable, and multiple-trial. Each of these has its peculiarly important determinants, both socioeconomic and psychological (e.g., Cherry in Watts, Super, and Kidd 1981).

The fourth example is the *rainbow model* (Super 1980), although its colorcoding cannot be illustrated here. This model (see figure 5) brings out both the longitudinal and the lateral aspects of careers and clarifies the use of both time and space in a career. Like the rocket and the rolling mill models, it illustrates just one case. In other cases, there might be no blue or shading for the worker incapacitated at age 21; no purple or shading in the life span or life space of the confirmed bachelor; and, in the case of some women and of some men, the homemaker role might occupy a much greater part of the life span and space. Like the stability model, the rainbow model merits thought, but it merely touches on some new dimensions without exploring any one of them in depth.

The fifth and last of the selected models of careers is the *life-stage model*. Like the first 3 models, its conceptual basis—human life stages—is not new, for the ancients wrote about the 7

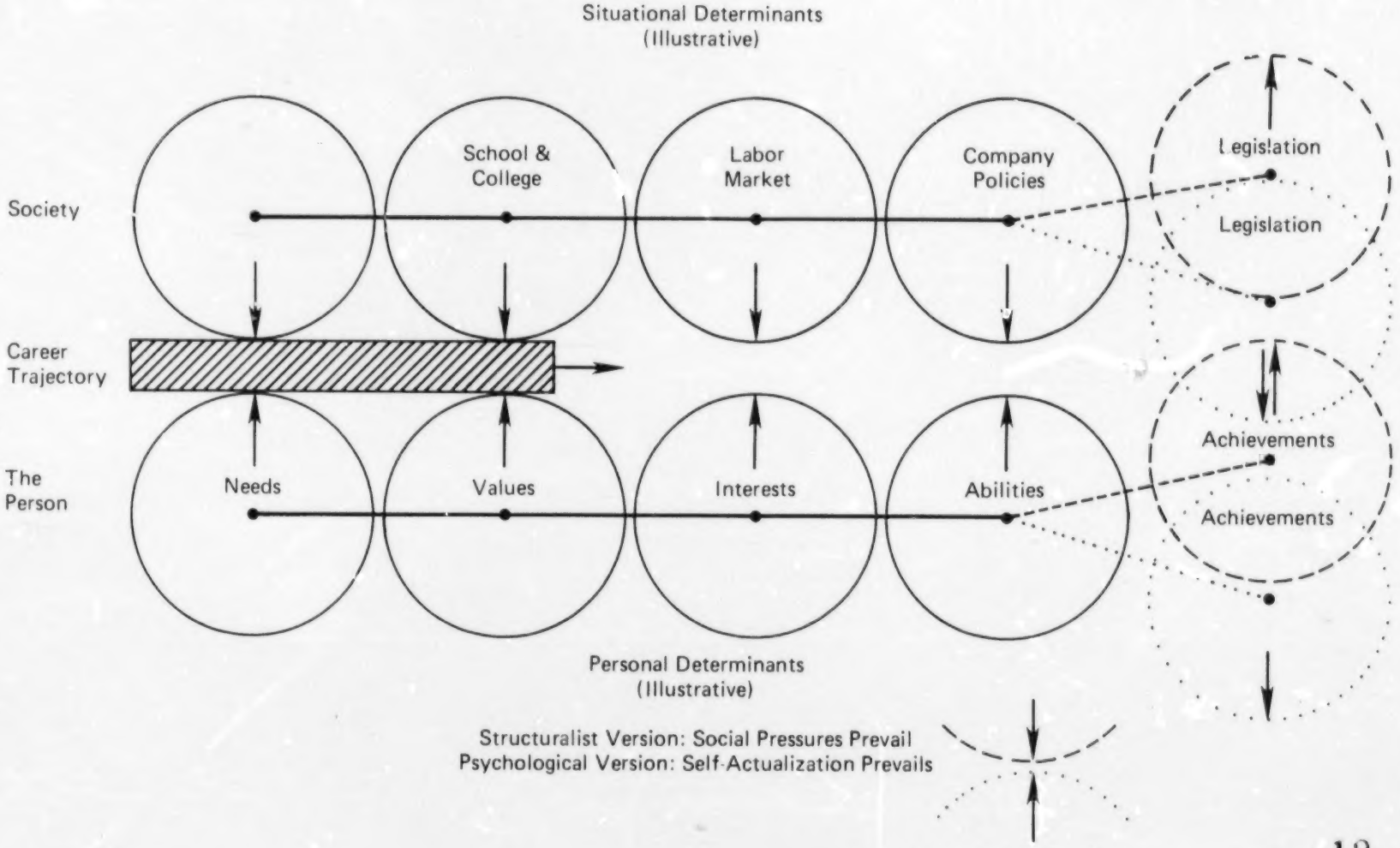


Figure 2. A psychosocial career model—the rolling mill

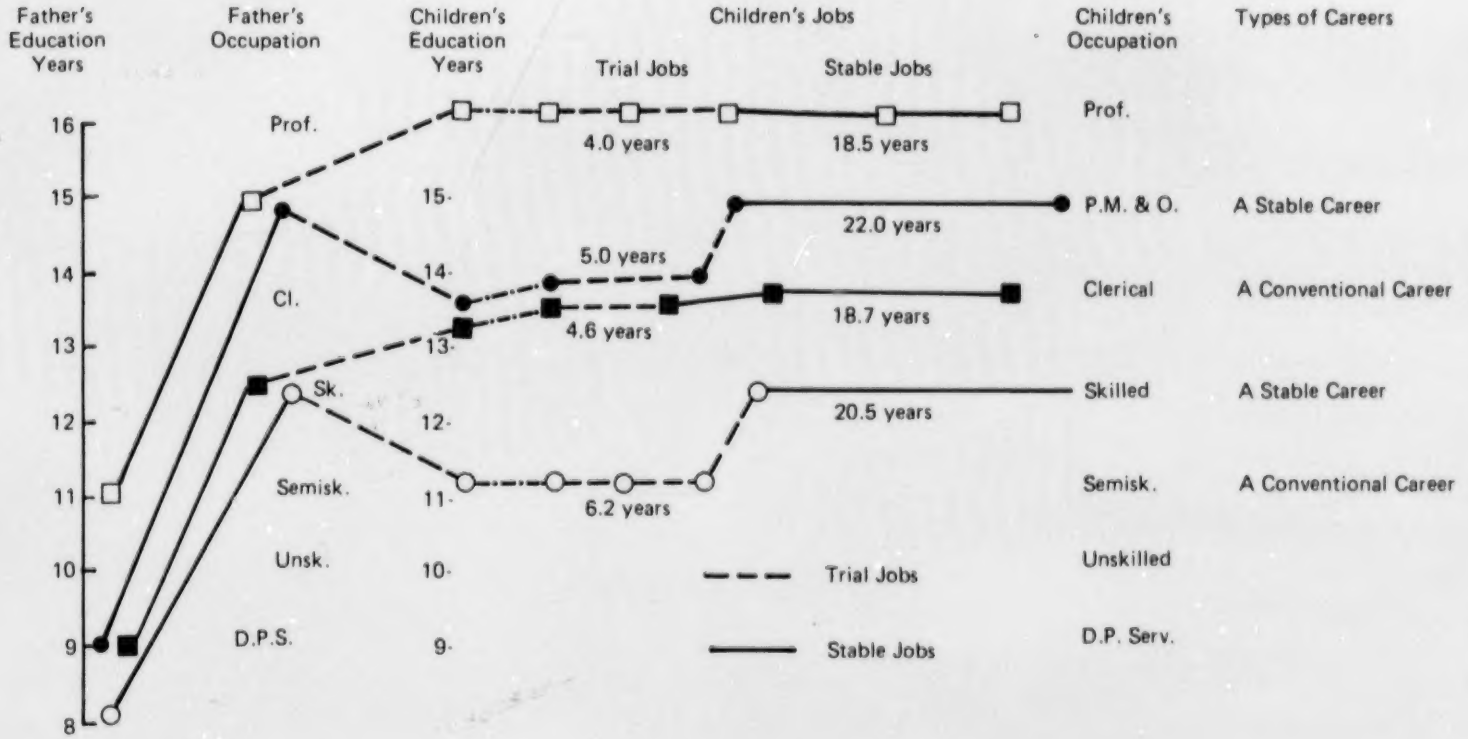


Figure 3. The stability model of careers—career patterns of higher-level occupations

SOURCE: Miller and Form (1951, p. 741).

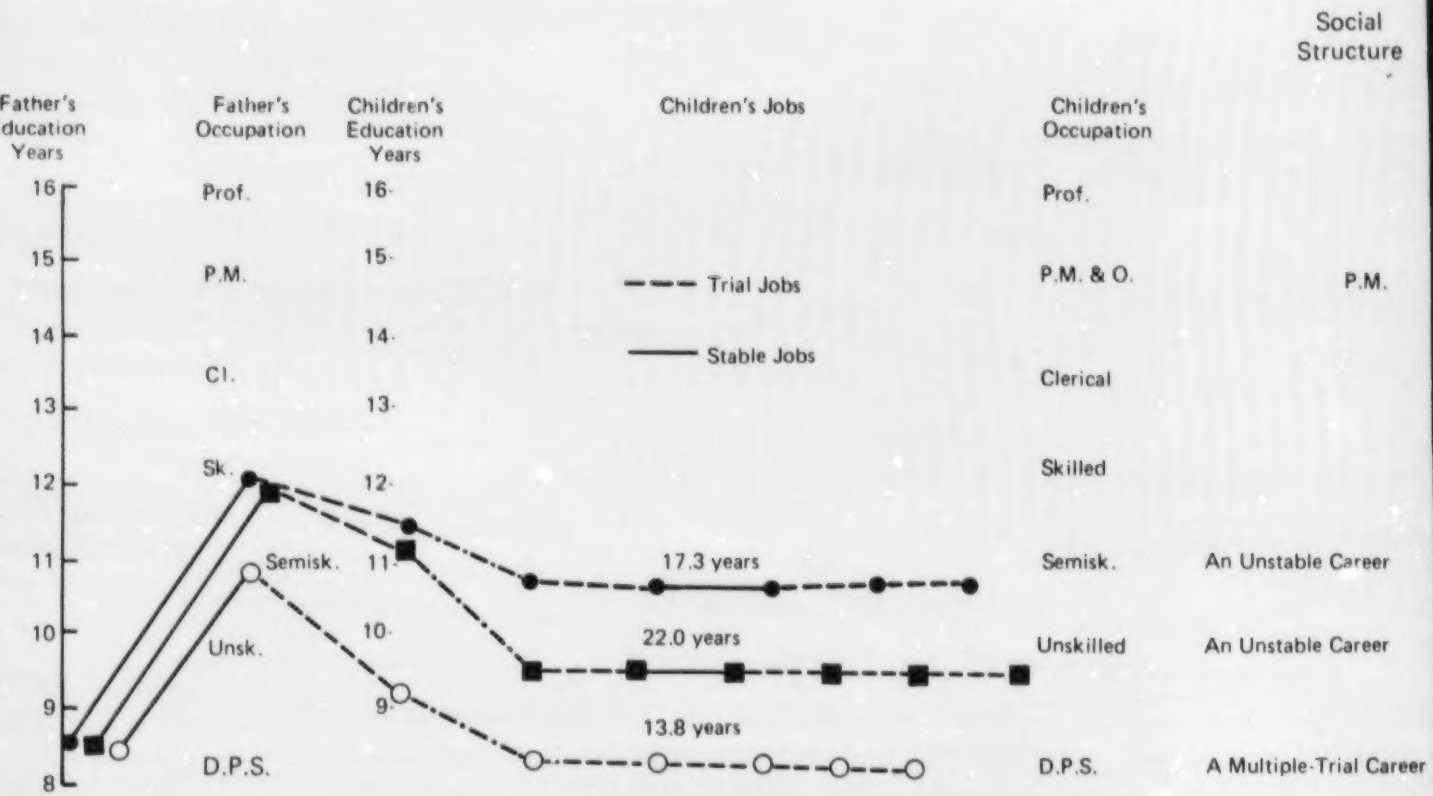
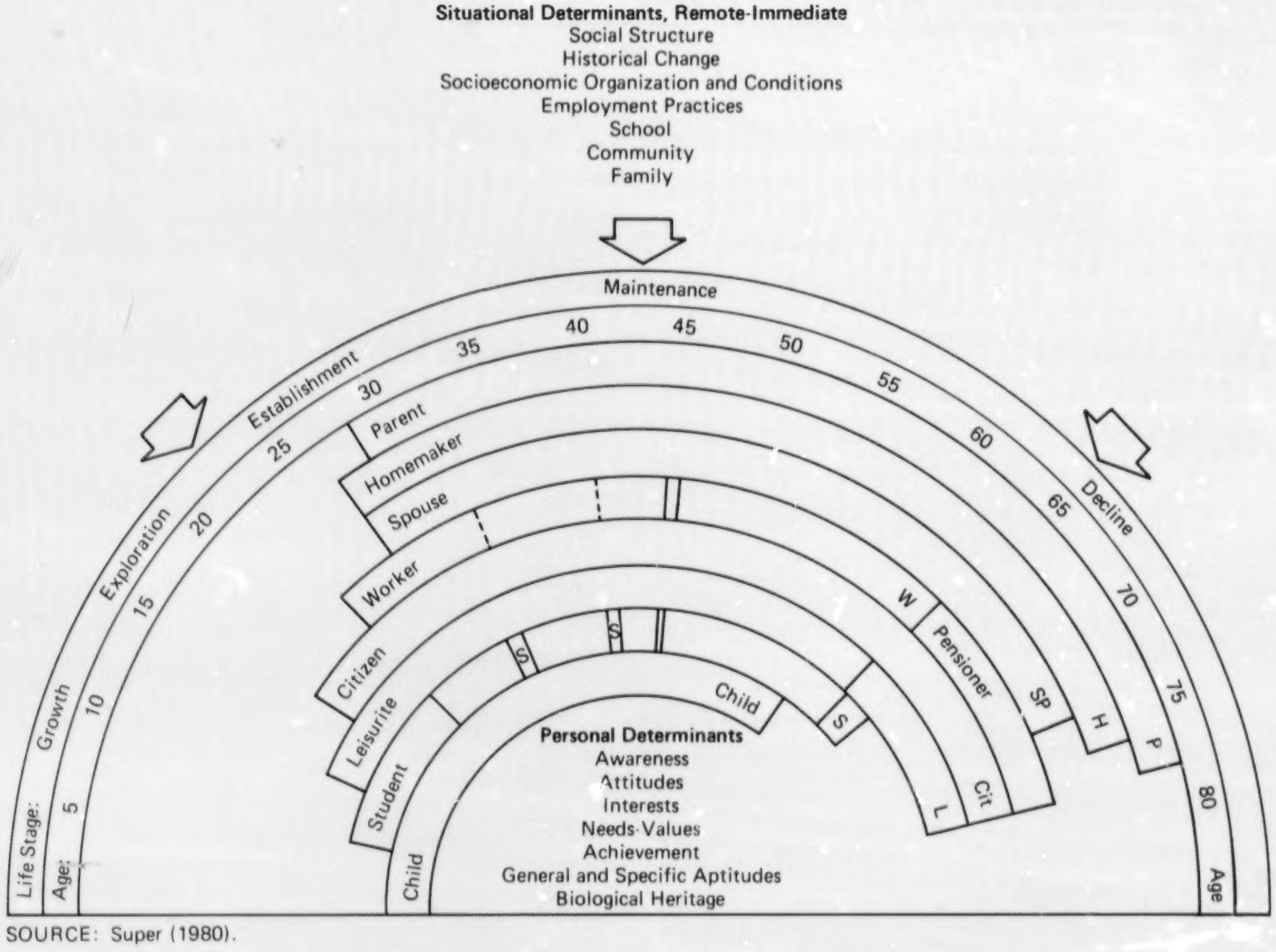


Figure 4. The stability model—career patterns of lower-level occupations

SOURCE: Miller and Form (1951, p. 742).



SOURCE: Super (1980).

Figure 5. The life-career rainbow: nine life roles in schematic life space.

ages of man, Oedipus overcame the Theban Sphinx with it, Shakespeare used it, and psychologists have been investigating it for 50 years (Buehler 1933; Super 1942, 1957). Figure 6 depicts the model, with the life stages at the right, vertically, the substages identified by broken horizontal lines, and the common methods of coping with the developmental tasks that are typical of each substage shown in between those lines. The ages denoting the transitions are, of course, approximations, for there are great individual differences in any developmental process. One other caution should be kept in mind in using this model: it does not show the recycling that people go through when they encounter the midcareer crises that are merely the extreme manifestations of the continuous processes of growth, exploration, establishment, maintenance, and decline as people and situations change.

That the model has been found useful is shown not only by its antiquity, but also by its periodic rediscovery, as in Lowenthal's (1975) and Levinson's (1978) work (see figures 7 and 8). Both of these researchers worked in apparent ignorance of what others had written on the subject, but when their models are graphically superimposed, their data support Super's synthesis of earlier findings.

Career Maturity and Adaptability

The concepts of developmental tasks and of the life stages into which they can generally be grouped led in the Career Pattern Study (Super 1955) to the development of the concept of career maturity. As has often been pointed out, the cultural lag between discovery and adoption in practice was, until the electronic revolution, about 25 years. It should not surprise us, then, that it was not until a decade or so ago that education began to reflect career development concepts in the career educational programs of the 1970s. Also, educational and vocational guidance and counseling began to take a developmental approach about then (Herr and Cramer 1983), and was provided with the tools needed to implement it (Crites 1973; Super 1973, 1983).

Career maturity has been defined as readiness to cope with the developmental tasks appropriate to one's life stage. Thus, a 14-year-old must, in most American school systems, choose between courses that will in due course lead toward or away from 4-year college or professional school; high school graduates and college graduates are expected to continue their education or to go to work; and men and women reaching the age of 65 or 70 are expected to retire, even though some people in each of those categories do not conform. Calling these coping behaviors career *maturity* has been shown to be warranted when referring to adolescence (Super and Nevill, 1984), but the facts of recycling and of discontinuity in adulthood have led recent theorizers and researchers (Super and Kidd 1979; Super and Knasel 1979) to use the term *career adaptability*.

Current models of *career readiness* (to use a more generic term) in adolescence and in adulthood have been found to be essentially the same, although the greater experience and time perspective of adulthood make for a more detailed and richer model. Figure 9 shows the model of adult career adaptability that has evolved from the recent work. Notice the details of time perspective, which follows autonomy or locus of control, two qualities that currently engage the attention of many psychologists. Exploration continues to play a major role throughout the life span as individuals get older and they and the situation both change. Information, as always, looms large, as do the ways in which it is used in decision making, where even more elaboration is needed to improve the focus on decision-making styles. Reality orientation, too, is more important in adulthood, for the explorations and planning of children and youths include what are often desirable elements of fantasy that facilitate the widening of occupational horizons and the dreaming of impossible dreams—dreams that may be realized as educational opportunities are put to good use

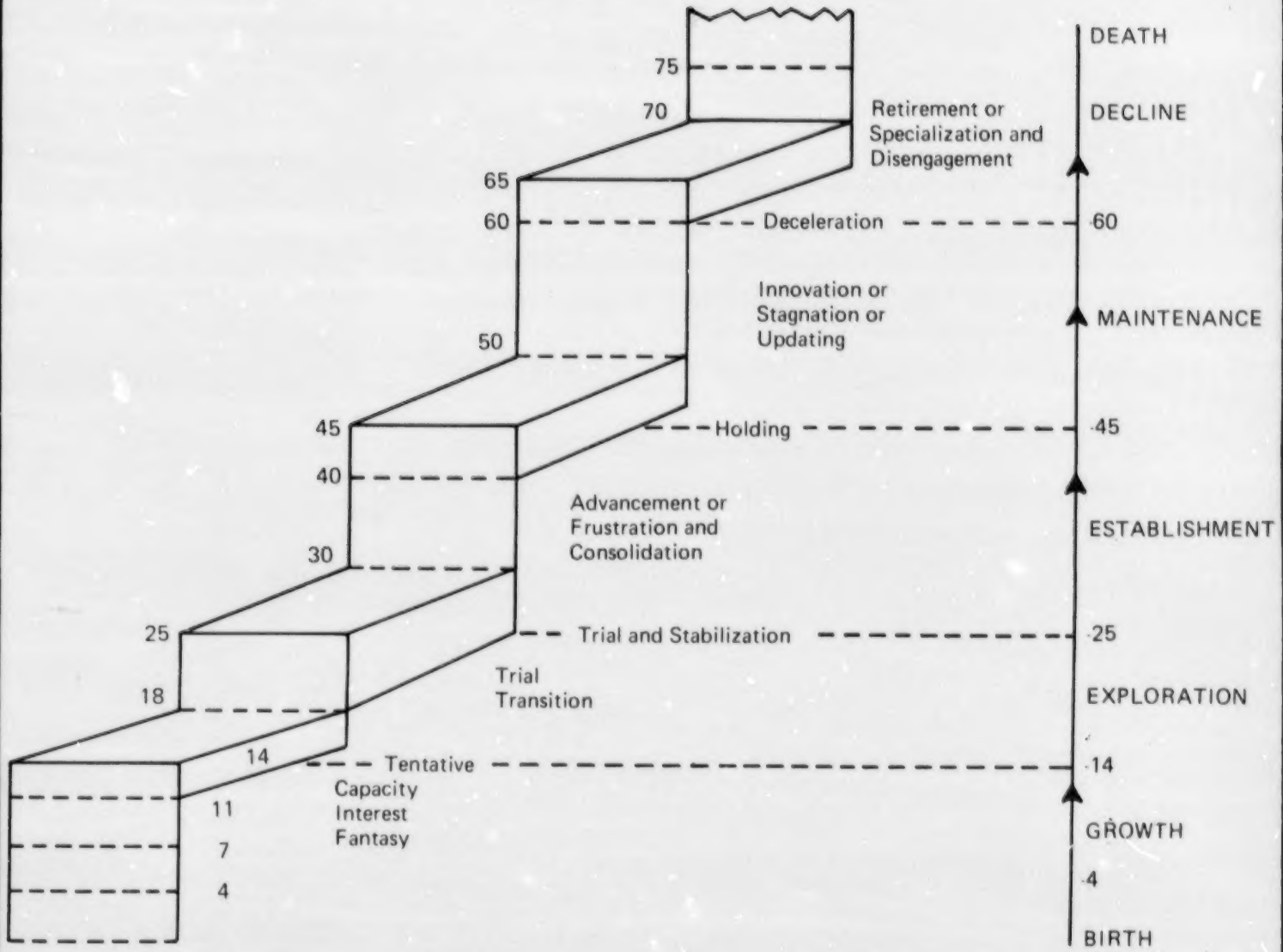


Figure 6. Life stages and substages: Super's 1957, 1963, 1981 formulation

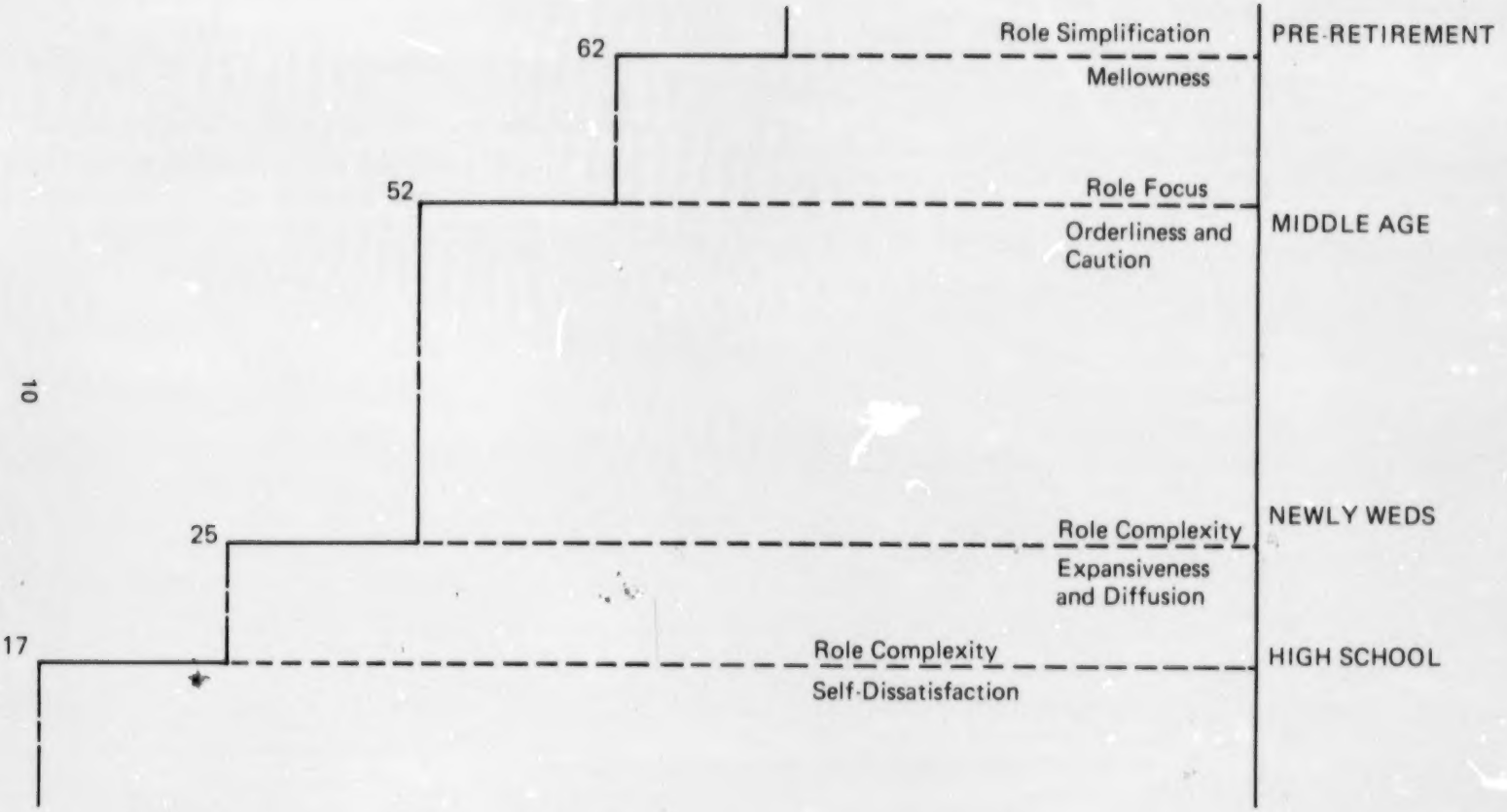


Figure 7. Life stages, pretransitional periods, and characteristics of men: Lowenthal's 1975 study

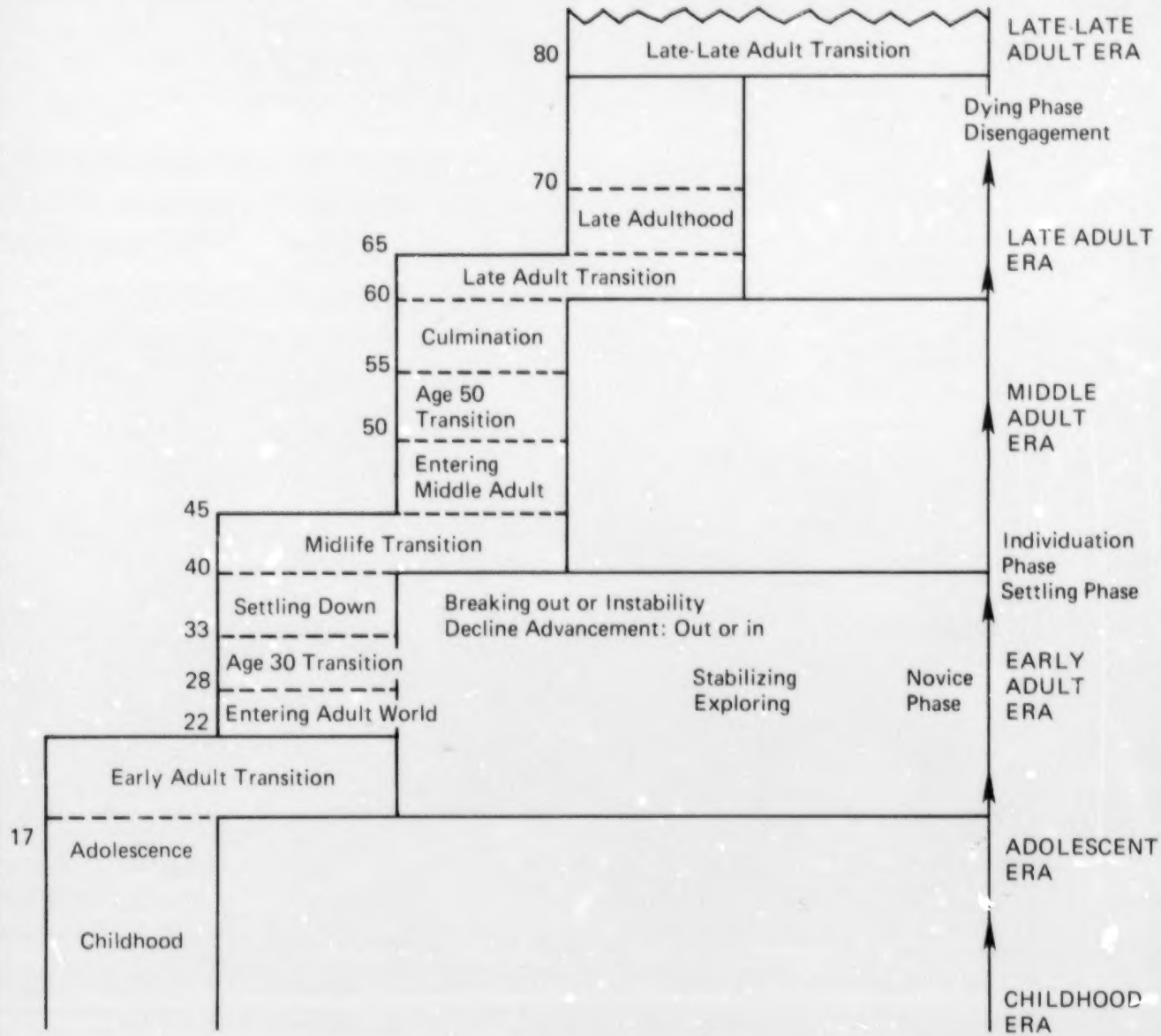


Figure 8. Life eras, developmental periods, and phases: Levinson's 1978 formulation.

I. **Planfulness**

A. Autonomy-Responsibility
   1. Educational Planning
   2. Occupational Planning

B. Time Perspective
   1. Past: Reflection
      a. Crystallizing
      b. Specifying
      c. Implementing
   2. Present-Immediate Future
      a. Stabilizing
      b. Consolidating
      c. Advancing
   3. Intermediate Future-Present
      a. Holding
      b. Keeping up
      c. Innovating
   4. Distant Future
      a. Tapering off
      b. Preparing to retire
      c. Retiring

II. **Exploration**

A. Querying
   1. Self
      a. In time-life stage
      b. In space-roles
   2. Situation
      a. In time-organization
      b. In space-life style

B. Resources (Attitudes toward)
   1. Awareness
   2. Valuation
   3. Willingness to Use

C. Participation-Use
   1. In-House
   2. Community

III. **Information**

A. Life Stages
   1. Time Spans
   2. Characteristics
   3. Developmental Tasks

B. Coping Behaviors
   1. Coping Options
   2. Appropriateness

C. Available Outlets
   1. Organizational
   2. Job
   3. Occupational

D. Implementation-Access

E. Probable Outcomes

IV. **Decision Making**

A. Principles
   1. Knowledge
   2. Valuation

B. Applications
   1. Use in Past: Styles
   2. Use at Present

V. **Reality Orientation**

A. Self-Knowledge
   1. Traits
   2. Performance

B. Realism
   1. Resources-Access
   2. Prospects

C. Consistency of Preferences
   1. Current
   2. Over Time

D. Crystallization
   1. Self-concept Clarity
   2. Goal Certainty

E. Work Experience
   1. Floundering vs. Stabilizing
   2. Stabilizing or Maintaining vs. Declining in Midcareer

Figure 9. A model of adult career adaptability

in adolescence. However, fantasies or dreams need more elements of realism for attainment in adulthood, when responsibilities or family life tend to immobilize people.

Career maturity, adaptability, and adjustment are often confused, although theorists and researchers (Super et al. 1957; Crites 1969) have sought to clarify the distinctions. Figure 10 shows a slightly abbreviated version of the maturity or adaptability model (left-hand column), and a model of vocational adjustment (right-hand column) that makes the familiar distinction between satisfaction and satisfactoriness, but goes beyond to identify aspects of career development that have been found conceptually and practically useful in a longitudinal study (Jordaan and Super 1974; Super, Kowalski, and Gotkin 1967). The point here is that the indices of career adaptability are antecedents of those of career adjustment, that the former are the causes of the latter. In essence, people who are adaptable adjust well.

Decision-Making Styles

It was noted earlier that a model of career maturity or adaptability should take into account the decision-making styles that characterize youths and adults. This is perhaps a truism, but it is a truism that has been widely disregarded. Only since the 1970s have theorists and researchers begun to recognize that not everyone makes decisions logically. Until recently, it has been taken for granted that everyone is, can become, and should be, logical in thought and rational in action. Our courses in careers, our assessment tools and procedures, and our teaching and counseling methods have begun with a logical formulation of the choice problem, the identification of needed data, and the collection of this pertinent information and its weighing, followed by a logical decision that leads to rational action. It is true that the progressive educationists did recognize that learning is affective as well as intellective, and that psychotherapists took into account that behavior is not all rational. This had little impact on educational and vocational counseling, however, except in nondirective counseling, which held that decision making was something clients did on their own after acceptance and clarification had taken place with the counselor's help.

Beginning with the work of Dinklage (1968) and Jepsen (1974), types and then styles of decision making were identified and methods of assessing them were developed. Arroba (1977) and Harren (1979) refined these ideas, and Harren developed a practical assessment measure—an essential step if counseling theory is to lead to useful research and eventual impact on practice. Although the terminology differs somewhat from one researcher to another, Arroba's style categories are representative and perhaps more complete than the others. They include the compliant, no-thought, emotional, intuitive, logical, and hesitant styles. Any one person may use a number of these at different times, in different situations. For example, a person may be logical in important new situations, compliant in unimportant familiar situations, and hesitant in important situations that contain unfamiliar elements and for which relevant data are lacking. A high school career education course, *Guided Career Exploration* (Super and Bowlsbey 1979), uses Dinklage's styles for clarity of communication. Figure 11 shows the planful decider as one who logically goes through each step of problem solving. Figure 12 shows the impulsive decider, who is likely to go directly from step 1 to steps 8 and 9 without exploration.

Underlying all career education courses and most career counseling is the assumption that all decision making should be logical, and that students and adults should be taught to make logical decisions according to problem-solving models. But as Arroba (1977) has pointed out, what appear to be intuitive decisions may actually be rational, with the decider having already gone through the relevant steps and stored the results in memory for retrieval when needed. A number of critics have questioned the wisdom, even the possibility, of teaching rational decision making to

VOCATIONAL MATURITY: ANTECEDENTS

I. **Planfulness**

- A. Acceptance of Responsibility
  1. Educational Planning
  2. Occupational Planning
- B. Time Perspective
  1. Present
  2. Near Future
  3. Distant Future
- C. Specificity of Plans
  1. High School
  2. Post-High School Education
  3. Occupational Entry
  4. Occupational Establishment

II. **Exploration**

- A. Querying and Information Seeking
  1. Willingness to Use Resources
  2. Evaluation of Resources Used
- B. Use of Resources
  1. Steps Taken: School Information
  2. Steps Taken: Post-High School
  3. Steps Taken: Employment Information

III. **Information**

- A. Focus
  1. Developmental Tasks and Stages
  2. World of Work: Occupations, Mores
  3. Preferred Occupational Field
- B. Specifics
  1. Preparation: Types, Sources
  2. Entry
  3. Duties
  4. Conditions
  5. Opportunities
  6. Life-style

IV. **Decision Making**

- A. Knowledge of Principles
- B. Application to Others and to Self

V. **Reality Orientation** (not spelled out: Self-Knowledge, Trait Crystallization, and Wisdom of Vocational Preferences)

VOCATIONAL ADJUSTMENT: CONSEQUENCES

I. **Satisfaction**

- A. Self-Estimated Occupational
- B. Self-Estimated Career

II. **Satisfactoriness**

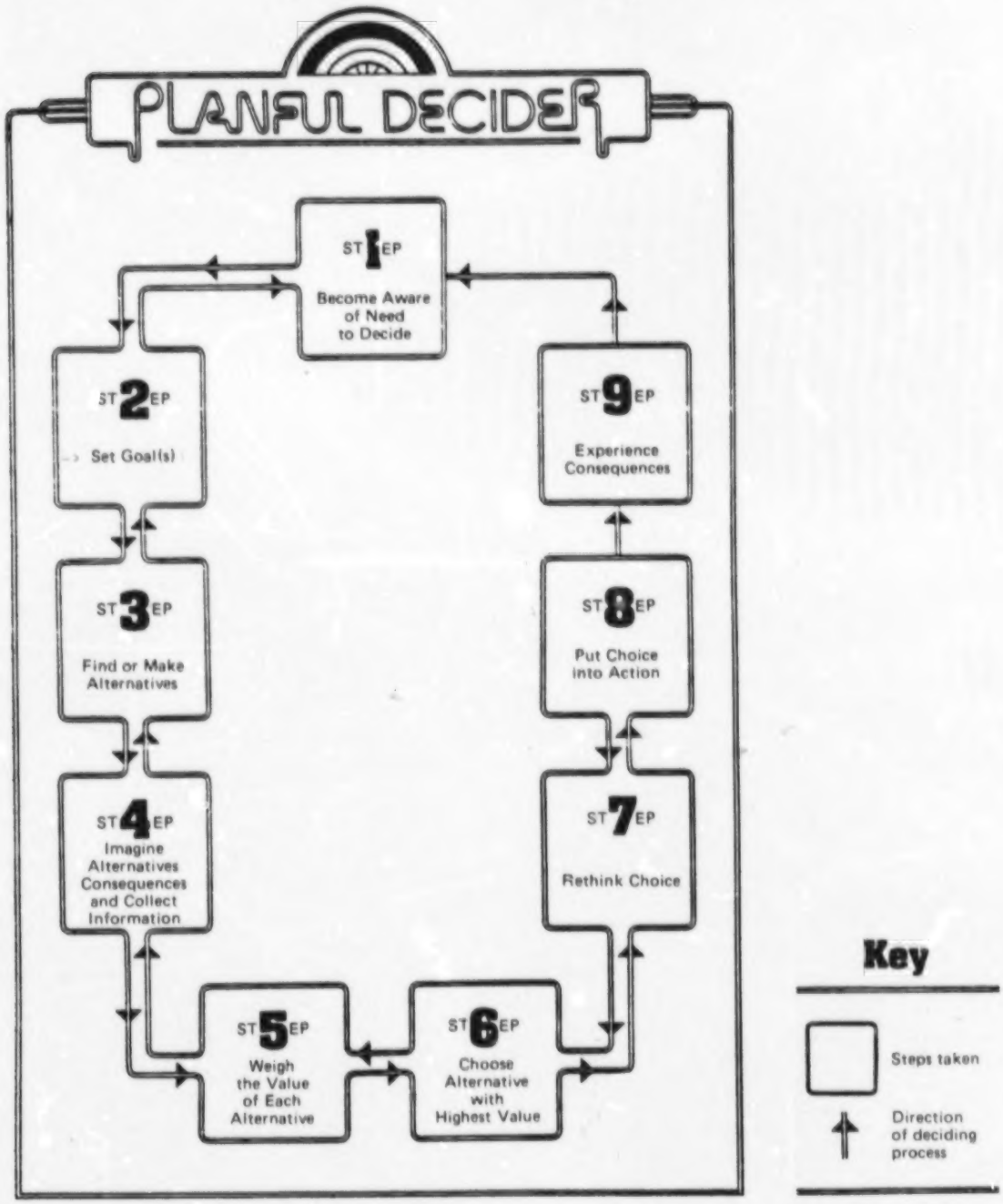
- A. Self-Estimated Occupational
- B. Self-Estimated Career
- C. Peer-Estimated Occupational
- D. Employer-Estimated Occupational
- E. Promotions
- F. Earnings
- G. Occupational Attainment

III. **Career Development**

- A. Employment
  1. Times Unemployed
  2. Months Unemployed
- B. Implementation of Preference
  1. Realism of Position Changes
  2. Improvement: Ability to Match
  3. Improvement: Interest Match
  4. Progress toward Goal
- C. Stabilizing in an Occupation
- D. Consolidation/Advancement
- E. Disengagement

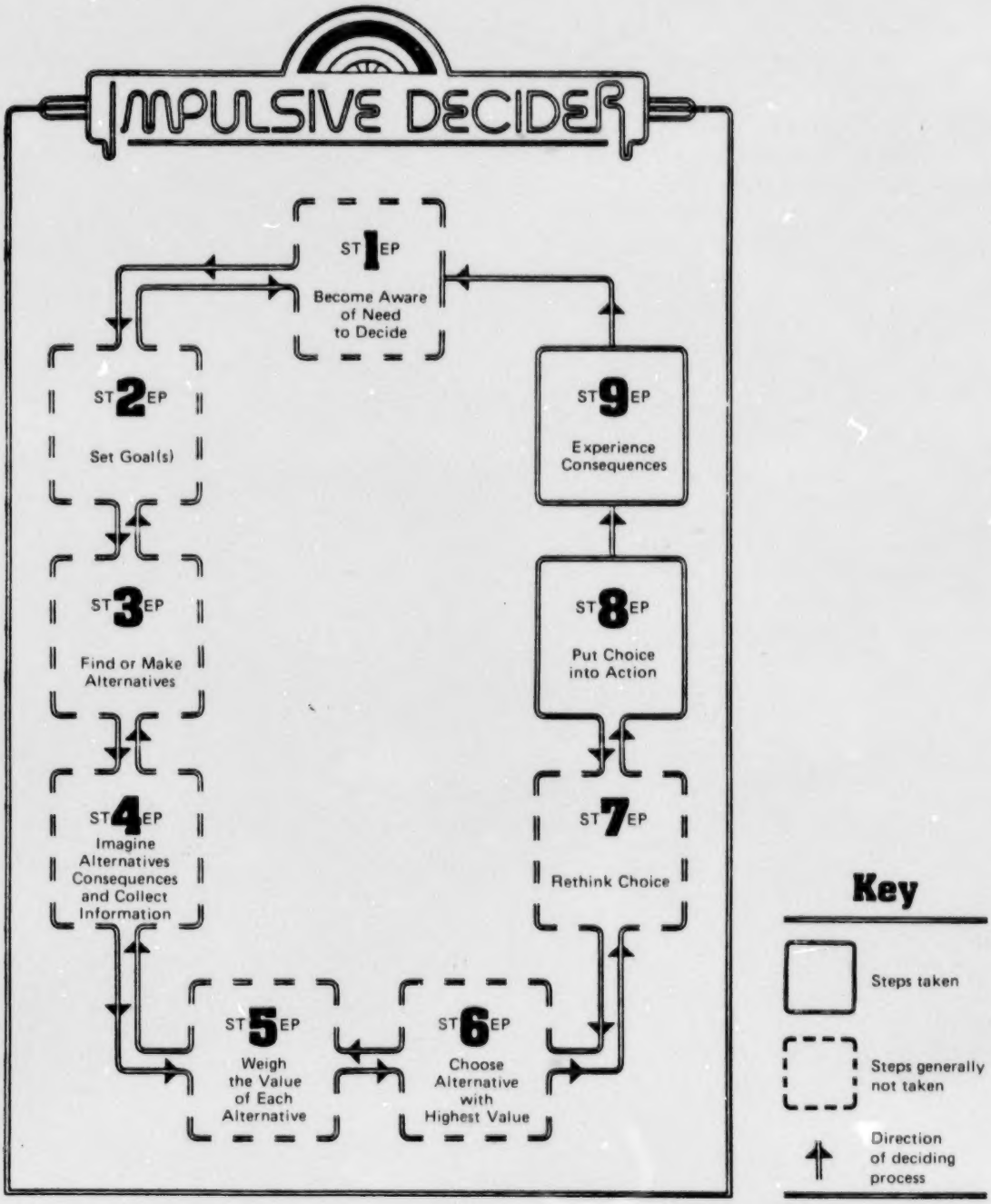
NOTE: other criteria could be listed: these have been tried in CPS.

Figure 10. Vocational maturity and vocational adjustment



SOURCE: Super, Bowlsbey (1979)

Figure 11. The planful decider



SOURCE: Super, Bowlsbey (1979)

Figure 12. The impulsive decider

people inclined to use other styles (e.g., the compliant deciders who feel controlled by the stratification system or the opportunity structure, or the intuitive deciders who find it difficult to go through a logical step-by-step process when they think they already know the answer).

Here is perhaps the new frontier of research and development in career counseling. We need better theory grounded in better research, more comprehensive research on methods, and better methods of career decision making. It has been gratifying to observe, during the last few years, that Jepsen's work at the University of Iowa, Harren's at Southern Illinois University, and Osipow's work at The Ohio State University show signs of converging with other work on career development.

Work Salience

Most people would probably agree that career adaptability is an important concept, and the research of the past 30 years supports the contention. But in the case of some economically disadvantaged people for whom work seems unobtainable, and for others perhaps so advantaged that work is to them unimportant, vocational maturity may not be a relevant construct (LoCascio 1974; Richardson 1974). If work is not important, readiness to make occupational decisions and to cope with vocational development tasks cannot be adequately assessed; such individuals have no reasons for vocational exploration or planning, for learning to make career decisions, or for acquiring occupational information. They may be mature and adaptable in other respects (e.g., wise in the ways of surviving on welfare or on an inherited fortune, or planful and informed as to the marriage market and the methods of assortative mating), but unaware of and unconcerned with the world of work and occupational careers.

This fact has directed some researchers to investigate the relative importance of work and of other life career roles, as exemplified by the rainbow model of careers (figure 5). This has led to the assembly of a multinational team of researchers (Super 1982) to develop methods for refining theory and devising effective assessment tools for use in determining the salience of work, homemaking, leisure, and other major life roles. In a prior study of secretaries employed to operate word processing systems in seven major corporations, Super and Thompson (1976) assessed what work means to employed people. The study found that, for some, it was a major life role, whereas for others, the home and family, their leisure activities, or their community service roles were more important; their work merely made it possible to play the important role in the desired way. Other studies reported similar results, but Super and Thompson pinpointed the problem as one in the domain of career assessment and counseling, and critical for career development and placement in business and industry.

The Salience or Life-Roles Inventory is now being standardized in seven countries, and five others are making ready to do so. These studies are expected to throw needed light on motivation to work and should prove useful to working counselors. In fact, Nevill and Super (in press) and Super and Nevill (1984) have shown that it is not sex or social status itself that determines career maturity and adaptability, but the relative importance of careers and work in the lives of high school and college students (and, we may therefore perhaps infer, of men and women). Figure 13 shows the model of the importance of a role and its three basic components: participation, commitment, and knowledge.

The Major Life Career Roles

1. Pupil or Student
2. Worker
3. Homemaker and Family Member
4. Leisurite
5. Citizen (Community Service)

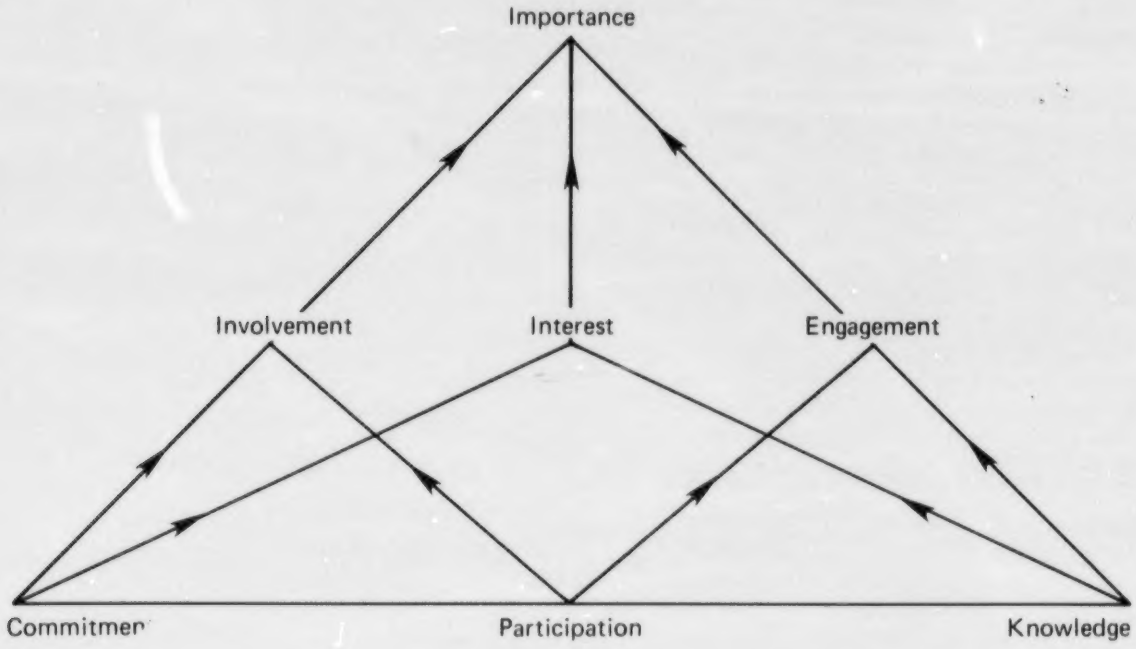


Figure 13. A model of the importance of work or other life career roles

A New Model of Career Assessment

Applied research such as has been discussed here is designed to lead to improvements not only in theory and instruments, but also in practice. It is therefore relevant to focus on the implications of conceptions of careers, of career adaptability, and of role salience for assessment as an early step in career counseling.

When people come for vocational counseling, counselors tend to focus on the resources the client may have for coping with his or her decision problem. These resources include health, family support, financial resources, motivation, intelligence, special aptitudes, educational attainments, experience, values, and interests.

In this classical model of assessment, the objective is to find an occupation or a job that matches the person's attributes. This well-known trait-and-factor model of assessment is illustrated in figure 14. Insofar as testing is concerned with new entrants into the labor market and with candidates for retraining or redirection, the model stresses the level and types of abilities and the field of interests. At one well-established university counseling center, for example, all student and adult applicants for vocational counseling are given the Strong-Campbell Interest Inventory as a routine part of the intake process. This matching process has been well researched and is well established, but it makes some unwarranted assumptions that bother many counselors. For example, it assumes that all such candidates are sufficiently mature vocationally for their traits to be stable, that they have been sufficiently exposed to the world of work to have a pattern of interests that can be meaningfully revealed or reflected in an inventory, and that they are ready to use the self-knowledge provided by the assessment in making career decisions. But a great deal of research has shown that these assumptions are not always justified.

Career or vocational maturity or adaptability in youths and adults has been sufficiently studied during the past 30 years so that we now know what they are and how to assess them. For students, we have multidimensional instruments such as Crites's (1978) Career Maturity Inventory, and truly bifactorial multidimensional tests, such as the Career Development Inventory (Super et al. 1981). For adults, we still do not have measures that match the multidimensional model shown in figure 9, for as has been pointed out elsewhere (Super and Kidd 1979), the universes of attitudes and information that are relevant to an unemployed coal miner in a region whose mines are exhausted are quite different from those that would have been pertinent to an unemployed aerospace engineer in Seattle at the time of the closing of Boeing's SST plant. A multidimensional career development inventory for adults needs to be developed for such special target populations as young blue-collar workers (Super and Knasel 1979), redundant corporate executives, and middle-aged housewives considering entering higher education and the world of work.

A *new model of career assessment* is clearly needed, one that is more comprehensive and more developmental than the classical matching model. Such a model is proposed in figure 15. *The developmental assessment model* resembles the classical model in step I, but after that there are significant differences. The first questions to be asked in step II are to ascertain the relative importance of the work and other major roles in the life scheme of the client. If work is important to him or her, then assessing career adaptability can be done with some confidence that the scores have real meaning; if the work role is not important, the scores will still be of interest as evidence of the career and work attitudes and knowledge of the client. With these data on hand, the counselor can ascertain the readiness of the client for exploration in breadth for the clarification of interests or in depth for their confirmation, or perhaps for training and employment opportunities that will provide outlets for mature and realistic interests.

Step I Preview

A. Assembly of Data on Hand

B. Intake Interview

C. Preliminary Assessment

Step II Depth-view: Further Testing?

A. Level of Abilities

B. Field of Interests

C. Matching and Prediction: Individual and Occupations

Step III Assessment of All Data

Step IV Counseling

A. Joint Review and Discussion

B. Revision or Acceptance of Assessment

C. Discussion of Implications for Action

D. Planning Action

Step V Follow-up

Figure 14. A classical career assessment process model

Step I — Preview
- A. Assembly of Data on Hand
- B. Intake Interview
- C. Preliminary Assessment

Step II — Depth-view: Further Testing?
- A. Work Salience
  1. Relative Importance of Diverse Roles
     - a. Study
     - b. Work and Career
     - c. Home and Family
     - d. Community Service
     - e. Leisure Activities
  2. Values Sought in Each Role
- B. Career Maturity
  1. Planfulness and Autonomy
  2. Exploratory Attitudes
  3. Decision-Making Skills and Styles
  4. Information
     - a. World of Work
     - b. Preferred Occupational Group
     - c. Other Life Career Roles
  5. Realism
- C. Level of Abilities and Potential Functioning
- D. Field of Interest and Probable Activity

Step III — Assessment of All Data
- A. Review of All Data on Career Development and Adaptability
- B. Matching and Prediction
  1. Individual and Occupations
  2. Individual and Nonoccupational Roles
- C. Planning Communication with Counselee, Family, etc.

Step IV — Counseling
- A. Joint Review and Discussion
- B. Revision or Acceptance of Assessment
- C. Assimilation by the Counselee
  1. Understanding the Present Stage and Next Stage of Development
  2. Understanding the Meanings of Work and Other Life Roles
  3. Exploration for Maturing?
  4. Exploration in Breadth for Crystallization?
  5. Exploration in Depth for Specification?
  6. Choice of Preparation, Training, or Job Objective?
  7. Searches for Job and Other Outlets for Self-realization?
- D. Discussion of Action Implications and Planning
  1. Planning
  2. Execution
  3. Follow-up for Support and Evaluation

Figure 15. Super's developmental assessment model

In step III, the assessment determines the aforementioned developmental data, plus data on ability levels and interests that come from the last step in testing. This is followed by counseling, in the logical model, although in reality there is often movement back and forth between steps II, III, and IV. Step IV in figure 14 shows counseling in much more detail than it is shown in the classical model, for there is much more for the client to assimilate. Much of it is new, such as understanding one's present and upcoming stage of career development with its typical development tasks. Also new is its focus on understanding life roles and how they may, as a constellation, provide better ways of attaining values, of finding outlets for interests, and of using abilities than can any one individual life role, such as work, homemaking, or leisure. The last steps, of course, involve putting the plans into action, sometimes independently and sometimes with periodic consultations as new data are collected and need to be evaluated and assimilated.

In seminars and workshops at places such as the University of Florida and at Virginia Tech, students have tried out this model and the novel instruments that make its use practical (i.e., the Salience Inventory and the Values Scale of the Work Importance Study, together with the College Form of the Career Development Inventory or the Adult Career Concerns Inventory). In this way the model and its instruments are being introduced in a small number of college and adult counseling centers, with built-in evaluations of the matching and of the developmental assessment models. Perhaps, as an eventual outcome, we shall see another quiet "revolution in counseling."

QUESTIONS AND ANSWERS

Donald Super

Question: We have heard much about changes in the workplace in terms of job redesign, the quality of work life, and so forth. What implications do you see in those kinds of changes for career counseling?

One of the implications—a most important one—is that career adaptability is vital. This, I think, is contrary to some of the conventional notions about vocational and technical education. It is often stated that, if a person doesn't use his or her training, whether vocational, technical, or professional, the training has been wasted. Dale Wolfle (1954) and his now ancient study of America's resources of specialized manpower pointed out that when a person highly trained in one field changes to another, it may be not a *loss* to society, but a *gain*. If that person is adaptable in going into another field, he or she may be making unique and very important use of prior training, if not immediately, perhaps ultimately.

I will give you a personal example. Having had all of my secondary education in France and all of my university education in England, I became a linguist; I can get along in a number of languages. Thus, when I dream of my adolescence, I dream in Frenc!.. One of my sons said, when a teenager, that must be as good as dreaming in technicolor! (That was back when technicolor was a new word.) However, for 23 years I never used my foreign languages. I worked almost entirely in English from age 22 into my 40s. Only twice, between 1932 to 1955, did I use my foreign languages, and then only for a few days at a time. During World War II, after about 15 years, I interviewed Polish flyers who had been in the Battle of Britain, for a job analysis of being a combat pilot. Later, in the early 1950s, I worked for two days with a French commission on industrial productivity.

Since 1955 I've made extensive use of the languages. Anyone looking at my career in 1940 or in 1950 would have said my language training and experience were wasted, but anyone looking at my career since 1955 would see journal articles written in French, a book written in French, lectures given in Polish, Italian, and Spanish, and so on. Admittedly, editors had to clean up my grammar and syntax in some instances, but the point I'm trying to illustrate is that, in a rapidly changing world, we just don't know whether training will be wasted.

We do know that it's very important to recognize the ability of people to retrain when the need arises. People who keep on learning, even after schooling, become by all known measures more intelligent than people who don't keep on learning. To put it in popular anatomical and neurological terms, if you keep on using the gray matter you have in your head, that gray matter doesn't wear out, it becomes more complex, more useful, and more adaptable. The people who keep on learning keep on improving their ability to learn; people who don't keep on learning find that their ability to learn deteriorates. And there is where counseling and continuing education really have to go hand in hand.

AT&T asked me to do a study because of a lawsuit in Wisconsin some years ago. A man was suing because he felt AT&T employment tests discriminated against him. These were tests of learning ability, and he was, he said, too old to learn, and therefore the tests were discriminatory. He said he was too old to learn, yet he was only 45 years old. What we know is quite the contrary; people who keep on learning are better able to learn at 45 than they were at 15 or 25. This is something we need to put across to our citizens. If people came to understand that learning is something that has to go on throughout the whole of life, and if learning could be made interesting, they would find their careers much more manageable in these days of change.

Question: Assuming that the age ranges of your models are physical ages, how do you account for people who change entire career paths at different ages than most others? How flexible are the models in terms of their expectations for people at different ages? For example, I know people who don't fit the characteristics your model suggests for their particular age range.

The ages that are given in the models are chronological ages, as you say, but they are intended only as approximations. I have pointed out already, for example, that there is much recycling; not everyone recycles, but many do. We know from all developmental studies that development is not linear. There are great individual differences in the rate of development, and there are irregularities in development. So the kind of age scale that you will find in my work or in Lowenthal's work or in Levinson's work has to be taken as a rough approximation of what is true of most people.

Incidentally, here is where I part conceptual company with Levinson. He is a psychoanalyst, relatively inflexible in his approach in that he thinks development is biologically determined every 5 years, one you make a transition, and: for all people at a given age it is the same kind of transition. That simply is not true. Yet, we do know that most people in their early 20s go through an establishment process, whereas most people in midcareer in their 40s cope mostly with maintenance tasks.

The model is based on averages. For example, the average man is about 5'9" tall, but 40 years ago or so the average used to be 5'7". Then I was average, but now I'm no longer average. Not all men are 5'9". We have to remember that averages have standard deviations, and we also have to remember that development proceeds unevenly. Children don't get taller by constant increments every year.

Question: In regard to your rainbow model and the other career models, how do they account for racial differences? For example, do they reflect the typical career paths of black Americans as well as they do white Americans?

The question of racial differences in the relevance or the applicability of career models is a good one, often raised but I think not addressed directly. There have been a number of studies of the careers of blacks, but I don't think they've ever addressed specific developmental models. My hunch would be—and this is just a testable hypothesis, not a conclusion—that the models probably apply to all Americans, but with modifications as the different opportunity structures of black workers affect the proportions coping in a given way with typical tasks. The opportunity structure for women has similarly been somewhat different from that of men. Obviously, this has some effect on the career patterns, and it means that fewer blacks (or whatever the minority is) will have stable careers. A smaller percentage have had the opportunity to pursue stable careers.

Homemaking, which is a major life role mainly of women, has meant that fewer women have had the opportunity to pursue stable occupational careers. Their careers may be stable psychologically, in that they may be integrating part-time or full-time homemaking with occupations. From a personal point of view, they may feel stability, but to the observer who classifies people strictly in terms of percentage of time given to the different roles their careers may seem unstable.

The fact that blacks have traditionally been educationally handicapped has meant more unstable and especially more multiple trial careers among blacks than among whites. But the models themselves don't differ for different groups. I think the percentages of people pursuing a given pattern differ, and the obstacles to pursuing economically favored patterns obviously are greater for persons who have been disadvantaged. Someday, someone will do a thorough research job on the career patterns of blacks. I've been aware of some beginnings, but I've not heard yet of the completion of such research.

Question: What career strategies do you feel would be most appropriate for dislocated or displaced workers, especially for those trying to find new jobs at comparable pay?

I assume you're concerned about the displaced, semiskilled workers who chose fairly high-paid semiskilled jobs and who, with the loss of opportunities in the automotive industries, for example, no longer have that kind of option. My suggestions on that subject may sound like an advice from a father to his son: keep alert and be adaptable. That may not seem very helpful, yet there's a point to be made.

One of the things that was found during the Great Depression of the 1930s was that the people who were reemployed first as the defense industries began opening up tended to be the people who had kept alert to employment opportunities. Those were the days when the job finders' clubs were founded. For example, we had meetings once a week at the YMCA in Cleveland. The unemployed people who belonged to the job club kept looking for work for themselves, and if they ran into something that might be of interest to someone else, they would call up the employment office and alert some other member of the club. So they were staying alert for themselves and for other people.

Job clubbers tried to be adaptable and tried to learn about new opportunities as they turned up. They learned to ask themselves whether the new opportunity was something they could do, even though they might not have done it before. They learned to ask such questions of themselves as, "Could I learn?" "Would I be an acceptable learner?" "Can I begin again at a lower wage?" Being alert and staying adaptable can be translated into programs by people who recognize it's just not employment—getting a job—that is involved, but it is also employability. Employability is partly a function of what you do with your unemployment.

Let me cite one more case. I did a study during the Great Depression of hobbyists in New York City: amateur musicians, amateur model railroad makers, stamp collectors, and other groups. The relevant hobby here is the model railroad makers. Model railroaders, as you may know, design the model railroad and construct it. This involves everything from laying track to making machine wheels for locomotives. It involves planning, constructing scenery and landscaping, laying out the paths to be travelled, working out the schedules, and operating the railroad—the whole thing from A to Z. The New York City subway system at that time had begun to change its signal system, and people were needed who, by definition, had railroad signal experience. The subway tried to recruit people who had worked on signal installations on the railroad, but not enough people could be found. One of the members of the New York Society of Model Railroaders had been a printer by trade, but the bottom had fallen out of the printing business in New York City. He was unemployed and had been for quite a while. Someone in his club said, "Look, you've been our signal expert in

the model railroad system, you know a lot about railroad signal systems, why don't you apply?" He applied, and the employment director had the imagination to hire him, so he found full-time, well-paid, steady employment as a signal systems installation expert with the New York City subways.

Here was a man who, though in a desperate kind of unemployment situation as far as printing was concerned, was able to keep himself and some of his interests and skills alive. He was alert to opportunity when someone else gave him an unusual lead. So I think the application of successful career strategies for displaced workers involves good use of free time not only in looking for a job or in getting retraining, but also in continuing to do some of the other things that one can do well to keep intellectually and emotionally alive.

Question: If you could change one major thing about counselor education across America, what would it be?

I think there will have to be several changes, not just one. One thing I would want to change is an excessive emphasis on emotional, social, and personality development. I say this even though I am a fellow in clinical psychology and headed a hospital psychological clinic at one stage in my career. In attempting to meet the psychotherapeutic needs of students many high school counselors have gotten off the track by giving considerable time to the needs of a relatively few, as Eli Ginzberg pointed out a long time ago, by doing inadequately what they were not adequately trained to do.

Important though the emotional needs of young people are, I think both the focus of the training of counselors and counselors' interests have gone overboard in that direction.

I think a renewed emphasis on career development is important, because without it one attends only to the short-range problems—for example, the problem of choosing a kind of training when entering 10th grade—as though that were going to be the beginning and end of training. Guiding students to aim at a single occupation—"my career"—in a world of constant change will not adequately equip them to handle changes. Counselors need an understanding of economic and technological change in society in addition to an understanding of intellectual and personality change in individuals.

So, if I could change counselor education, I would insist on more adequate instruction in economic history, with emphasis not only on the contemporary scene but also on what lead up to and what might evolve from it. I would also have a greater emphasis on and better treatment of life stages and developmental tasks. As I see it, counselor education typically pays only lip service to these two crucial topics.

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